REMARKS

Claims 15-34 are pending in the application. Applicants appreciate the Examiner's indication of allowable subject matter in claim 26.

Claims 15-19, 22, 27-30, 33 and 34 stand rejected under 35 U.S.C. §102(e) as allegedly being anticipated by U.S. Patent No. 6,661,752 (Spink et al.). Claims 20, 21 and 25 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Spink et al. and claims 23, 24, 31 and 32 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Spink et al. in view of U.S. Patent No. 5,002,375 (Hoppl et al.). Applicants respectfully request withdrawal of these rejections and allowance of the pending claims.

Applicants' invention is directed to a microscopy system for observing an object by plural observers. As recited in claim 15 for example, the microscopy system comprises at least one objective lens arrangement for receiving an object side beam emanating from an object plane and for transforming the object side beam into an image side beam, a first ocular system arranged to enable a first observer to observe the object by looking into the first ocular system, a second ocular system arranged to enable a second observer to observe the object by looking into the second ocular system and a controller.

The first ocular system comprises at least one first ocular tube having at least one first ocular for generating an image of the object plane from the image side beam and at least one first image projector having a first display for superimposing an image displayed by the first display with a beam path of the first ocular system such that the image of the object plane is perceived by the first observer in superposition with the image of the first display.

The second ocular system comprises at least one second ocular tube, distinct from the at least one first ocular tube, and having at least one second ocular for generating an image of the object plane from the image side beam, and at least one second image projector, distinct from the at least one first image projector, and having a second display, distinct from the first display, for superimposing an image displayed by the second display with a beam path of the second ocular system such that the image of the object plane is perceived by the second observer in superposition with the image of the second display.

At least one optical setting of the first ocular system is adjustable independently of a corresponding optical setting of the second ocular system. The controller is configured to generate the image displayed by the first display of the first ocular system from a first input image based on the at least one optical setting of the first ocular system as well as to generate the image displayed by the second display of the second ocular system from the first input image based on the at least one optical setting of the second ocular system.

Each of the plural observers uses a separate ocular system; that is, one ocular system is associated with one observer. The image perceived by the user looking into the ocular system originates from two sources: the first source is the optically generated image of the object plane and the second source is the image projector having the display.

Two image projectors, each having a distinct display, are utilized. The image of each display is superimposed with the respective optically generated image of the object plane in the ocular systems. Each observer perceives an electronically generated image that is superimposed with the optically generated image. The electronically generated image is generated by a display and projected into the beam path such that it is superimposed with the optically generated image.

For this purpose, each of the ocular systems has its own image projector and display. That is, there are plural (i.e. two) projectors and displays in Applicants' invention as recited in claim 15.

Spink et al. describe a shutter control for the integration of additional data into an observation beam path by selectively switching off an undesired observation channel. Spink, however, discloses a microscopy system having only one display 16. An image, projected by display 16, is reflected by prism 14 selectively into one or other of the ocular systems (21a and 21b).

Applicants have disclosed two distinct image projectors (and corresponding displays). Spink discloses a single projector and a single display. Spink, therefore, simply fails to teach or disclose Applicants' invention as claimed. Accordingly, Spink does not anticipate Applicants' invention as claimed.

Furthermore, as recited in claim 15, the controller is configured to generate the image displayed by the first display of the first ocular system from a first input image based on the at least one optical setting of the first ocular system.

In exemplary embodiments, the optical setting of the first ocular system is the magnification or the orientation of the ocular system about the main optical axis.

The Examiner appears to identify the "optical setting" with orientation of the prism 14. Assuming, *arguendo*, that it may be possible to identify the position of the prism with an "optical setting", Spink et al. do not disclose that the generation of the image depends on that optical setting. In Spink et al., the image displayed by display 16 is not dependent on the orientation of the prism 14. The generated image is independent of the orientation of prism 14 and the user

may select the ocular system into which the displayed image should be projected by orienting the prism. However, the image which is displayed by the display 16 is independent of that orientation.

As recited in claim 15, the image generated by the controller and displayed by the first display is based on the optical setting of the first ocular system. A change in the optical setting of the first ocular system will result in a corresponding change of the generated image. In exemplary embodiments, a change in the magnification of the first ocular system results in a change of the magnification of the generated image. Alternatively, a change in the orientation of the first ocular system about the main optical axis results in a change of rotation of the generated image.

Additionally, with respect to claim 15, Spink et al. also fails to teach or disclose both generated images displayed by the distinct first and second displays being dependent on the optical settings of the respective first and second ocular systems.

At least for these reasons, it is believed that independent claim 15 is allowable over Spink et al. As for claim 28, Spink et al. fails to disclose multiple displays as highlighted above. Therefore, claim 28 is also allowable over Spink et al.

Claim 19 recites that the at least one optical setting of the first ocular system comprises a rotational position of the first ocular tube about the optical axis and that the controller is configured to generate the image displayed by the first display of the first ocular system by rotating the first input image by a first image rotation angle determined in dependence of the rotational position of the first ocular tube.

Spink et al. fails to disclose generation of the displayed image by rotating an input image by an image rotation angle which is determined in dependence of the rotational position of the first ocular tube.

Claim 23 recites that the at least one optical setting comprises the magnification of the image generated by the first ocular system and that the controller is configured to generate the image displayed by the first display of the first ocular system by scaling the first input image with a first scale factor determined in dependence of the magnification of the image generated by the first ocular system.

The Examiner indicates that Hoppl et al. (US 5,002,376) discloses a surgical microscope having two ocular systems, wherein each ocular system comprises an independent zoom system for adjusting a magnification of the respective ocular system.

Hoppl, however, fails to teach or suggest the image generated by the controller for display by the first display of the first ocular system being scaled by a scale factor determined in dependence of the magnification (i.e. the setting of the zoom system) of the first ocular system.

The remaining claims, all of which depend on one of allowable, independent claims 15 and 28, are also allowable.

All of the rejections having been overcome, it is believed that this application is in condition for allowance and a notice to that effect is solicited. Should the Examiner have any questions with respect to expediting the prosecution of this application, he is urged to contact the undersigned at the number listed below.

Respectfully submitted,

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